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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,138	10/15/2003	Brian J. Brown	S13.12-0145	6236

38356 7590 03/12/2007
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EXAMINER

TYSON, MELANIE RUANO

ART UNIT	PAPER NUMBER
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3731

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/686,138	Applicant(s) BROWN ET AL.	
	Examiner Melanie Tyson	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-19 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-19 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's amendment received on 19 January 2007.

Corrections made to the drawings and the claims are accepted.

Response to Arguments

1. Applicant's arguments with respect to claims 1-9, 12-19, and 22-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6, 13, 14, 16, 17, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Case et al. (Publication No. 2004/0167619 A1). Case et al. disclose a device (Figure 15) comprising a generally tubular structure (80) formed of a material substantially invisible under MRI visualization (paragraph 38), a cell (82) defining a portion of a peripheral circumference of the tubular structure (80), and a RF marker (77) including a plurality of windings of conductive material (a radiopaque wire that rings the edges of the cell, paragraph 52) that defines a perimeter, or delineates a circumference of the cell (82). Case et al. further disclose inserting the device into a body cavity and exposing the medical device to a magnetic field generated by an MRI

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system (paragraph 38). Since the marker is used to visually detect the device under MRI (paragraph 38), it is inherent that the clinician is visually detecting changes in anatomic spins due to the RF energy emitted.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Case et al. in view of Tiefenbrun et al. (Patent No. 5,425,765). Case et al. disclose a device as described above, however, fail to disclose the cell is interconnected to additional cells by connectors. Tiefenbrun et al. disclose a device (Figure 1) comprising cells (24, 26, 28, 30) that are interconnected by connectors (strut portions of wire mesh 22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Case et al. with cells interconnected by connectors as taught by Tiefenbrun in order to provide a single device capable of

bypassing an entire damaged region without blocking other blood vessel junctions (column 1, lines 17-23 and 40-51).

7. Claims 7-9 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Case et al. In addition to the structure described above, Case et al. further teach alternate embodiments in which the peripheral circumference of the tubular structure (80) includes two or more cells that may include the RF marker as described above (paragraph 52), and also teach the RF markers may be embedded in the device (paragraph 42). Since the markers are visible under MRI, it is obvious that the markers are oriented relative to one another to generate RF energy under magnetic fields applied in different directions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the device with two or more cells and/or an RF marker that is embedded in itself in order to better adapt the marker for the device (paragraph 42) and to be able to utilize the device in an area of the body that contains multiple branches (paragraph 52).

8. Claims 12, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Case et al. in view of Jackson et al. Case et al. disclose a device as described above, however, fail to disclose a magnetic susceptibility marker connected to the generally tubular structure. Jackson et al. disclose a tubular structure (Figure 3). Jackson et al. teach connecting magnetic susceptibility markers (such as paramagnetic materials; paragraph 16) that are visible under MRI to the tubular structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Case et al. with a magnetic susceptibility marker as taught by

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Jackson et al. in order to clearly recognize the position of the device under MRI (paragraph 16), thus facilitating proper implantation. Furthermore, since the magnetic marker is used to visually detect the device under MRI (paragraph 38), it is obvious that the user is visually detecting changes in atomic spins due to the magnetic marker.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Tyson whose telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Friday 9:00 a.m. - 5:30 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie Tyson
March 5, 2007




ANH TUAN T. NGUYEN
SUPERVISORY PATENT EXAMINER

3/9/07